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EXAMINER THOMAS, JASON M				
ART UNIT		PAPER NUMBER		
2423				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/829,498

Applicant(s)

MA, KENNETH

Examiner

Jason Thomas

Art Unit

2423

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pp. 9-11, filed May 22, 2009, with respect to the rejections of claims 12-39 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Verosub et al., U.S. Pub. No. 2004/0205028 A1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-14, 18, 26-28, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi et al., U.S. Patent No. 6,769,127 B1 (hereinafter Bonomi), in view of Tsao, U.S. Pre- Grant Pub. No. 2003/0079016 A1 (hereinafter Tsao), Brooks et al., U.S. Patent No. 7,339,993 B1 (hereinafter Brooks), Reiningger et al., U.S. 6,404,738 B1 (hereinafter Reiningger), Vitikainen et al., U.S. Pre- Grant Pub. 2003/0065802 (hereinafter Vitikainen) and Verosub et al., U.S. Pub. No. 2004/0205028 A1 (hereinafter Verosub).

Regarding claims 12 and 26: Bonomi teaches a two part media system and method of operating such, that stores media contents and also delivers media content to an end device over a network at a data rate sufficient to enable real-time playback (see [abstract], [col. 2, ll. 30-36], [cols. 2-3, ll. 52-4], [col. 12, ll. 24-42]) and supports the delivery of media content and the quality of service (QOS) thereof (see [col. 7, ll. 10-32]).

Bonomi does not teach wherein the device is a network attached storage device (NAS).

Tsao teaches using a NAS server to accomplish the storage and delivery of video streams to client devices (see [6], [7]).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to use a NAS server, as taught in Tsao, when providing a media system with the ability to store and deliver video content, as taught in Bonomi, because a NAS server is a media system capable of accomplishing such goals.

Bonomi does not teach storing programming in a proprietary and non-standard digital format.

Brooks teaches using proprietary formats as a means to retrieve data (where the proprietary format is non-standard in that it is an "other format" and not a standard such as AVI, MPG, MOV, etc.) (see [col. 17, ll. 23-35]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use proprietary format, as taught in Brooks, when

receiving and storing media content, as taught in Bonomi, because proprietary formats which encompass non-standard formats, provide added security.

While Brooks teaches the use of other formats such as "asf" which are well known to have the ability to preclude the use of audio and video by unauthorized devices, Brooks does not explicitly teach wherein this feature is used or wherein devices can receive authorization from the source device to change the format from one which is not accessible to one which is accessible by the end user device.

Verosub teaches a digital content store system which transfers content to a receiving device in a format which is coded such that it is only known to the "owner/sender" and cannot be played until authorized for decoding, whereby after receiving authorization the data associated with the content is changed from a protected and proprietary format to one accessible by the end device (see [fig. 3], [44], [45], [72-80]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmitted file and sending device by precluding the file from being accessed without proper authorization and also providing authorization for the coded files as taught by Verosub in order to protect the rights of distributed content.

Bonomi does not teach determining an end-to-end QOS which evaluates a hierarchy of content creation sources, transmission media and end device playback technology nor evaluating media type, a specified quality of service requirement to determining allocated bandwidth and transmission priority.

Reininger teaches a system which provides a dynamic allocation of bandwidth to control transmission quality priorities by using profiles and satisfaction indexes which evaluates a hierarchy (a highest satisfaction index) of content creation sources and transmission media to provide a desired of soft-QOS parameters (see [abstract], [col. 3, ll. 40-62], [col. 4, ll. 15-25], [cols. 4-5, ll. 60-8], [col. 6, ll. 46-56], [col. 7, ll. 5-11]).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to use a soft-QOS system to control the bandwidth and transmission priorities, as taught in Reininger, when providing a system designed to deliver content to clients with various receiving capabilities, as taught in Bonomi, because using this system provides a dynamic means to provide the best quality per user based on user requirements (see [abstract], [col. 10, ll. 15-27]).

While Reininger does mention taking into consideration the performance requirements of a client the end device playback technology is not discussed.

Vitikainen teaches providing a set of parameters associated with a receiving device so that the format of the video content which is transmitted is formatted to comply with (see [abstract], [20], [23]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art that such end device technology parameters, as taught in Vitikainen, could be combined as a factor of the hierarchical determinations made to provide a user defined QOS, as taught in Reininger, because the quality

of the content transmitted to an end device is also a significant factor in determining the necessary settings to provide a pre-established desired satisfaction index.

Regarding claims 13 and 27: The combined teachings of the aforementioned prior art teach the ability to record professionally recorded and distributed materials (see Bonomi [col. 8, ll. 35-54] for On-Demand delivery which consist of professionally recorded media), specified media resolution characteristics (see Bonomi [cols. 37, ll. 1-21] for resizing media to a specified media resolution), downloaded materials (see Bonomi [col. 1, ll. 37-45], [col. 6, ll. 20-36] where media content is downloaded over the internet), and personal recording through a home recording device (see Bonomi [col. 21, ll. 11-34] where subscribers can record video programs for later viewing) and providing a dynamic allocation of bandwidth to control transmission quality priorities by using profiles and satisfaction indexes which evaluates a hierarchy (a highest satisfaction index) of content creation sources and transmission media to provide a desired of soft-QOS parameters (see Reininger [fig. 4], [abstract], [col. 3, ll. 40-62], [col. 4, ll. 15-25], [cols. 4-5, ll. 60-8], [col. 6, ll. 46-56], [col. 7, ll. 5-11]).

Regarding claims 14 and 28: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the first part defines the hierarchy of transmission media including data packet networks, in-structure dedicated wired coupling, wireless communication links and further defines an associated bandwidth for each (see

Reininger [abstract], [col. 3, ll. 40-62] for bandwidth adjustments to associate (renegotiate) a bandwidth based on wireless and wired connection requirements, see also [cols. 1-2, ll. 66-12] where such adjustments include that of data packet networks).

Regarding claims 18 and 34: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS utilizes a proprietary formatting system to preclude reading of the stored materials by other devices (see Brooks [col. 17, ll. 23-35] for using a proprietary format).

Regarding claim 35: The combined teachings of the aforementioned prior art teach the method of claim 34 further including, as a part of producing audiovisual programming in a digital media format, reconstructing the audiovisual programming into a non-proprietary and standard format (see [col. 17, ll. 31-35] where the media content can be stored in a proprietary format and also where the requesting device can request to receive the media content in a standard non-proprietary format such as an avi or mpg).

3. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen and Bridgelall, U.S. Patent No. 6,895,255 B1 (hereinafter Bridgelall).

Regarding claim 33: The combined teachings of the aforementioned prior art do not teach wherein the transmission media includes at least one of a Bluetooth wireless network and an IEEE 802.11 standard protocol wireless

network and wherein the method includes transmitting the audiovisual programming over one of the Bluetooth and 802.11 standard protocol wireless networks.

Bridgelall teaches a dual mode wireless data communication device which is capable of transmitting data on both Bluetooth and IEEE 802.11 signals (see [abstract], [col. 1, ll. 50-61]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide the capability to communicate data over either Bluetooth and/or IEEE 802.11, as taught in Bridgelall, when providing a system capable of providing data over a wireless signal, because both IEEE 802.11 and Bluetooth are useful for wireless networking (see [col. 1, ll. 15-33]).

4. Claims 15, 16, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen, Itoh et al., U.S. Pre-Grant 2001/0016108 A1 (hereinafter Itoh), Smith et al., U.S. Patent No. 6,128,649 (hereinafter Smith), Gerszberg et al., U.S. Patent No. 6,452,923 B1 (hereinafter Gerszberg) and Kim, U.S. Pre-Grant Pub. No. 2002/0082057 A1 (hereinafter Kim).

Regarding claims 15 and 29: The combined teachings of the aforementioned prior art teach providing multimedia content to devices based on the device parameters in a type of hierarchical form such that the capability of the receiving device determines the quality level or type of transmitted multimedia content (see [abstract], [7-9]) but does not teach doing so with an standard display TV, high definition TV, portable digital video recorder, wired high fidelity

sound system, wireless headphones, wired headphones and handheld display devices however Bonomi teaches where the use of a computer monitor is a well known means of displaying media contents (see [cols. 37, ll. 1-21]).

Itoh teaches using a standard television and portable digital video recorder which also acts as a handheld display device (see [51], [52] where these devices are well known to be used in the art for the display of media content).

Smith teaches transmitting video in HD resolution to an HDTV (see [col. 26, ll. 20-35] where an HD television is a well known means of displaying media content).

Gerszberg teaches using a speaker system capable of broadcasting high fidelity sound (see [col. 9, ll. 34-43] where using a hi-fi system is well known in the art to transmit high quality audio).

Kim teaches where the use of wired and wireless headphones are a well known means of presenting media to listeners (see [5-8]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means for establishing a level or type of media transmissions, as taught in Reininger when servicing receiving devices such as stand television, portable PVRs, or handheld display devices, as taught in Itoh, or HDTVs as taught in Smith, or hi-fi sound systems, as taught in Gerszberg, or wired and wireless headphones as taught in Kim, because these types of display and auditory devices are well known in the art to be used to present media to users.

Regarding claims 16 and 30: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the hierarchy of end device playback technology further includes associated display resolution parameters (see Bonomi [col. 37, ll. 1-21] where associates a display resolution with the resized media which is transmitted).

5. Claims 17, 19-23, 25, 31 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen and Rudd, U.S. Pre- Grant Pub. No. 2002/0152173 (hereinafter Rudd).

Regarding claims 17, 22, 23, 31 and 37: The combined teachings of the aforementioned prior art do not teach the content and transmission media aware NAS system wherein the NAS evaluates digital rights management parameters to evaluate whether a public key infrastructure (PKI) code is enabling and whether the end device is an authorized device for the PKI code.

Rudd teaches a system which is capable of evaluating digital rights management (DRM) parameters to determine if a device is an authorized device based on public key information such that only an authorized device (which can regulate usage according to the DRM parameters) can receive (copy) an original electronic work (see [236], [237], [616-621]).

At the time the invention was made, it would have been obvious to one of ordinary skill to use such DRM parameters, as taught in Rudd, when designing a system which provides media content to clients, as taught in the combined teachings of Bonomi, in view of Tsao, Brooks, Reininger and Vitikainen, because

by using digital rights management the electronic works which are stored the use of the clients can be controlled and protected (see [3]).

Regarding claim 19: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS evaluates previous playback to prevent the same file from be played by more than one device at any time including the NAS only producing to one device at a time (see Bonomi [abstract] for a media system capable of storing and delivering media; see also Tsao [abstract] where a NAS device is used as a media server; see also Rudd [abstract] where only one original work can exist at a given time).

Regarding claim 20: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS is operable to produce a subsequent copy to any playback device only after determining that a previously produced copy has been, removed, deleted, or destroyed (see Rudd [33] for the concept of the creation of a new original file if the previous original was destroyed).

Regarding claim 21: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS is operable delete a file copy in conjunction with producing the file to another device if the other device has file storage capacity (see Rudd [3], [7], [abstract] for the ability to move a file from one location to another which requires

creation of a new original and the deletion of previous original such that only one original work exist at a given time).

Regarding claim 25: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS is operable register the ripping or copying status into a central repository to disable user ripping the same content again in another network unless the first copy is deleted from the NAS (see Rudd [abs], [3] for where the device has a central repository which is used to control all actions to be performed on an electronic work).

6. Claims 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen and Greaves et al., U.S. Patent No. 6,185,688 B1 (hereinafter Greaves).

Regarding claims 24 and 32: The combined teachings of the aforementioned prior art do not teach the content and transmission media aware NAS system wherein the NAS is operable prevent files from being streamed or played outside of a home network boundary.

Greaves teaches a system capable of effectively inhibiting unauthorized use of a computer outside of an authorized (home) network environment (see col. 1, ll. 42-65]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means of preventing file access outside of a home network boundary, as taught in Greaves, when providing a computing

device which is capable of storing and delivering media content, as taught in Bonomi, because personal media content created and stored for later delivery to members of a home should not be available to clients outside of the home network for privacy.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen and Iverson, U.S. Patent No. 6,052,379 (hereinafter Iverson).

Regarding claim 36: The combined teachings of the aforementioned prior art do not teach the method of claim 26 further including providing port based bandwidth priority wherein a device producing digital media on a first port is given priority over a device producing digital media on a second port.

Iverson teaches a priority scheme for assigning priority to a port (see [col. 1, ll. 66-11], [claim 1]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use such a scheme or prioritizing ports, as taught in Iverson, when providing a means of delivering data requiring a portion of bandwidth to a client, as taught in Bonomi, because the method of prioritizing ports can provide a more efficient way to transmit multiple outputs of data streams.

8. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen, Rudd and Mangold et al., U.S. Patent No. 6,668,324 B1 (hereinafter Mangold).

Regarding claim 38: The combined teachings of the aforementioned prior art do not teach the method of claim 37 wherein the NAS only produces audiovisual programming having copy restrictions to a PKI enabled device that does not have copying capability for making permanent copies of the audiovisual programming.

Mangold teaches a device which can not make any copies such that after the device has received data (such as video) the data gets thrown away (see [col. 10, ll. 45-55]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to only send media content to a device that can not copy or save data, as taught in Mangold, when providing a system capable of delivering media content to clients, as taught in Bonomi, because by only sending the media content to devices that cannot reproduce or save the media content the sender has effectively provided an alternative means protect data from unauthorized use (see [col. 1, ll. 18-25], [col. 1, ll. 46-48]).

9. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi, in view of Tsao, Brooks, Reininger, Vitikainen, Rudd and Ananda et al., U.S. Patent No. 6,931,549 B1 (hereinafter Ananda).

Regarding claim 39: The combined teachings of the aforementioned prior art do not teach the method of claim 37 wherein the NAS evaluates safety of a transmission link and, based upon the evaluated safety of the transmission link,

provides a specified amount of protection for audiovisual programming which is to be propagated over the transmission link.

Ananda teaches a means of verifying the transmission link between two computers, evaluating the safety and providing protection for the data which is to be exchanged over the link (see [abstract], [col. 9, ll. 7-26], [col. 9-10, ll. 61-15]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means of verifying the integrity of the transmission link, as taught in Ananda, when transmitting media content which is privately owned, as taught in he combined teachings of Bonomi, in view of Tsao, Brooks, Reiningner, Vitikainen and Rudd, because without providing a secure means of transferring data from one computer to another it is possible for public clients to intercept private communications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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